

Please amend the specification as follows:

Page 4, replace the last paragraph and the continuation of this paragraph on page 5, with the following replacement paragraph, amended as indicated:

The published prior art ~~U.S. Disclosure 0070449A1~~ documents the use of a sol-gel material resulting from the de-alcoholation of an alkoxy silane. The process temperature is between 80 °C and 150 °C. The fluorescent material is admixed with a solution of this sol-gel material, which is then applied and heated to produce a glass-like body. Two different dopants were also used with the sol-gel material. These dopants have compositions of SeSeEu^{2+} , which emits red fluorescent light, and $(\text{Sr, Ba, Ca})\text{S:Eu}^{+2}$, which emits green fluorescent light. The light-emitting device has a glass-like layer containing said fluorescent materials with a thickness of 100 microns (micrometers) or less.

The following is the full text of the amended paragraph from Page 4, last paragraph and the continuation of this paragraph on page 5:

The published prior art documents the use of a sol-gel material resulting from the de-alcoholation of an alkoxy silane. The process temperature is between 80 °C and 150 °C. The fluorescent material is admixed with a solution of this sol-gel material, which is then applied and heated to produce a glass-like body. Two different dopants were also used with the sol-gel material. These dopants have compositions of SeSeu^{2+} , which emits red fluorescent light, and $(\text{Sr, Ba, Ca})\text{S:Eu}^{+2}$, which emits green fluorescent light. The light-emitting device has a glass-like layer containing said fluorescent materials with a thickness of 100 microns (micrometers) or less.

Please replace Page 11, with the following replacement page, amended as indicated:

Wherein in Formula I:

R = Hydrogen, C₁ to C₈ Alkyl, Halogenated C₁ to C₈ Alkyl, or Glycidyoxyalkyl

R₁ = Ethyl, propyl, another C₁ to C₈ Alkyl, Halogenated C₁ to C₈ Alkyl, Phenyl and Halogenated Phenyl

R₂ = Methyl, Ethyl or another C₁ to C₈ Alkyl

~~**OR' = Methoxy, Ethoxy, Propoxy, Butoxy, or another C₁ to C₈ Alkyl**~~

X, U, Y = Si, Ge, Ti or Sn

Z = Alkyl, Substituted Alkyl, Phenyl, Substituted phenyl

Wherein in Formulas II, III and IV:

R = Methacryloxyalkyl, Acryloxyalkyl, ~~glycidyoxyalkyl~~ Glycidyoxyalkyl

R₁ = Phenyl or Substituted Phenyl; Ethyl, Propyl or another C₁ to C₈ Alkyl; or Trifluoroalkyl such as Trifluoropropyl

R₂ = Methyl, Ethyl or another C₁ to C₈ Alkyl

~~**OR' = Methoxy, Ethoxy, Propoxy, Butoxy, or another C₁ to C₈ Alkyl**~~

X, U, Y = Si, Ge, Ti or Sn

Z = Alkyl, Phenyl, substituted Phenyl

The subject SOG material is preferably produced in a non-aqueous media and may be heat cured or UV light cured, depending upon the exact structure of the material. The SOG material of the present invention is preferably produced from an alkyl ~~or dialkyl~~ substituted trialkoxysilane or dialkyl substituted dialkoxysilane, wherein the alkyl group has 1 to 8 methyl groups, represented by the formula:

The following is the full text of amended page 11:

Wherein in Formula I:

- R** = Hydrogen, C₁ to C₈ Alkyl, Halogenated C₁ to C₈ Alkyl, or Glycidyoxyalkyl
R₁ = Ethyl, propyl, another C₁ to C₈ Alkyl, Halogenated C₁ to C₈ Alkyl, Phenyl and Halogenated Phenyl
R₂ = Methyl, Ethyl or another C₁ to C₈ Alkyl
X, U, Y = Si, Ge, Ti or Sn
Z = Alkyl, Substituted Alkyl, Phenyl, Substituted phenyl

Wherein in Formulas II, III and IV:

- R** = Methacryloxyalkyl, Acryloxyalkyl, Glycidyoxyalkyl
R₁ = Phenyl or Substituted Phenyl; Ethyl, Propyl or another C₁ to C₈ Alkyl; or Trifluoroalkyl such as Trifluoropropyl
R₂ = Methyl, Ethyl or another C₁ to C₈ Alkyl
X, U, Y = Si, Ge, Ti or Sn
Z = Alkyl, Phenyl, substituted Phenyl

The subject SOG material is preferably produced in a non-aqueous media and may be heat cured or UV light cured, depending upon the exact structure of the material. The SOG material of the present invention is preferably produced from an alkyl substituted trialkoxysilane or dialkyl substituted dialkoxysilane, wherein the alkyl group has 1 to 8 methyl groups, represented by the formula:

Page 12, please replace the paragraph beginning at line 12 and continuing to page 13, with the following replacement paragraph, amended as indicated:

A process is provided for producing the subject sol-gel spin-on glass (SOG) material of the present invention by: reacting an alkyl ~~or dialkyl~~ substituted trialkoxysilane or a dialkyl substituted dialkoxysilane with a silane diol, wherein said alkyl group has from 1 to 8 carbon atoms. The silane diol is preferably a diphenylsilanediol, a 1,3-Bis (3-hydroxypropyl) tetramethoxysilane, a 1,3-Bis (4-hydroxybutyl) tetramethylsilane, a fluorinated silane diol, or a mixture of one or more of these silane diols. The alkyl group may be replaced with a methacryloxypropyl, acryloxypropyl, or epoxy moiety. The trialkoxysilane may have one or two C₁ to C₈ alkyl, methacryloxypropyl and/or alkoxy groups on the same molecule ~~or~~ and the dialkoxysilane may have one or more (preferably 1 to 3) C₁ to C₈ alkyl, methacryloxypropyl and/or alkoxy groups on the same molecule. The process may further comprise adding an inorganic or organic dopant, wherein the dopant preferably comprises a phosphor dopant (such as a YAG base phosphor or a moisture sensitive phosphor) nano-particles, or an organic material such as an organic dye or a metal complex.

The following is the full text of the amended paragraph from Page 12, beginning at line 12 and continuing to page 13:

A process is provided for producing the subject sol-gel spin-on glass (SOG) material of the present invention by: reacting an alkyl substituted trialkoxysilane or a dialkyl substituted dialkoxysilane with a silane diol, wherein said alkyl group has from 1 to 8 carbon atoms. The silane diol is preferably a diphenylsilanediol, a 1,3-Bis (3-hydroxypropyl) tetramethoxysilane, a 1,3-Bis (4-hydroxybutyl) tetramethylsilane, a fluorinated silane diol, or a mixture of one or more of these silane diols. The alkyl group may be replaced with a methacryloxypropyl, acryloxypropyl, or epoxy moiety. The trialkoxysilane may have one or two C₁ to C₈ alkyl, methacryloxypropyl and/or alkoxy groups on the same molecule and the dialkoxysilane may have one or more (preferably 1 to 3) C₁ to C₈ alkyl, methacryloxypropyl and/or alkoxy groups on the same molecule. The process may further comprise adding an inorganic or organic dopant, wherein the dopant preferably comprises a phosphor dopant (such as a YAG base phosphor or a moisture sensitive phosphor) nano-particles, or an organic material such as an organic dye or a metal complex.